Let's pretend it's a rainy day in late March, the tail end of your spring calving season. Hundreds of baby calves frolic alongside their mothers on a well-worn pasture that's about to welcome yet another new life to a wet and muddy morning.

After many weeks of heavy use, these tired pastures have accumulated afterbirths, urine and feces. It's a harsh environment for a newborn calf to start its life. How will you protect this animal from pathogens that stand to threaten its future well-being?

Newborn calves are immediately exposed to many environmental challenges, and in no case is this truer than in the final weeks of the calving season.

“Calves born during the first several weeks are fortunate to begin life in a relatively clean space,” notes Scott Sturgeon, DVM of Sturgeon Veterinary Services in Hydro, Okla.

“However, calves born late in the season typically enter the world under less sanitary conditions. They face more contamination issues, which will only continue to worsen the longer the calving area is occupied.”

As a result, a higher percentage of calves born during the calving season’s last quarter suffer from scours due to pathogen buildup than calves born earlier in the season.

“Producers have two main goals during this exciting and stressful time of year,” Sturgeon says. “The first is to get a live calf on the ground and the second is to prevent it from getting scours. Calves born at end of season have a higher risk of contracting the main causes of scours — E. coli, rotavirus and coronavirus.”

Antibody product protects calves from scours

Cattle producers can take various steps to optimize newborn calf health for animals arriving on the season's backend. Using a United States Department of Agriculture (USDA)-approved antibody product, such as First Defense®, is an excellent way to give calves — especially these latecomers — the immediate protection they need.
“In just one dose, you can effectively defend against E. coli and coronavirus,” explains Sturgeon. Available in bolus, gel tube or powder form, this immunity builder should be given as soon as possible following birth and definitely within the first 12 hours of life — the critical timeframe for antibody absorption.

“I’ve seen the benefits of this product firsthand,” shares Sturgeon, whose work takes him throughout Oklahoma, Kansas, Texas and Arkansas. “I have clients who faced scours issues for a number of years and had great success after incorporating an antibody product into their calving regimen. They abandoned scours vaccination in lieu of an easy-to-manage bolus. In doing so, these producers have seen a major decrease in scours and an increase in overall herd health as calves grow up, boosting the farm's bottom line.”

Vaccination of the pregnant cow during her third trimester is one way some farms attempt to protect newborns from scours. But there are limitations to this labor-intensive approach.

“This two-dose vaccine requires running a cow through a chute on two different occasions,” Sturgeon says. “In addition, the vaccine provides the greatest immunity when given as close to calving as possible. This poses a problem for calves born at season’s end, as they’ll receive less immunity in the colostrum compared to calves born earlier.”

In contrast, a natural colostrum antibody product provides every calf, regardless of birth date, with equal immunity in a one-time, easy-to-administer dose. The ability to dose alongside colostrum is another important benefit as some products on the market require a waiting period between administering the antibody and feeding colostrum.

“Any time there is a delay in colostrum intake, the calf is put at greater risk for failure of passive immunity,” points out Bobbi Brockmann, vice president of sales and marketing with ImmuCell Corporation.

“Concentrated antibody products can be fed to calves simultaneously to colostrum so there is no interference with maternal antibodies and no waiting for a response from the calf’s immune system. It also means less stress because the calf does not have to divert its precious energy reserves from maintenance and growth to mounting an immune response.”

While immunizing is certainly advantageous, Sturgeon reminds us that, “Nothing beats good management practices.” Rather than introducing an entire crop of calves to the same pasture or pen, some farms with the land and resources to do so choose to give animals a fresh start on clean pasture or in clean facilities at various intervals throughout the calving season.

“Switching pastures halfway through the season is becoming a popular practice,” says Sturgeon. “In some cases, intensive managers may even move cows as often as every week to 10 days to ensure calf health isn’t compromised.”

Prevention is the goal

When it comes to scours, it’s more economical to prevent this repressive and costly disease than it is to treat and endure its never-ending ramifications.

“You need to consider the long-term value of a calf,” Sturgeon says. “A calf that gets scours is set back for life. It’s more likely to acquire respiratory diseases and not gain as well throughout its entire life cycle. If you prevent a calf from getting scours, you set it up for a healthier life. It’ll gain more and be more efficient on its dam’s milk, as well as grass and other feed sources. The cost to immunize is minimal compared to the lifelong toll of scours.”